UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/762,814	01/22/2004	David Bau	BEAS-01388US1	6120

23910 7590 09/11/2007
FLIESLER MEYER LLP
650 CALIFORNIA STREET
14TH FLOOR
SAN FRANCISCO, CA 94108

EXAMINER
KHATRI, ANIL

ART UNIT	PAPER NUMBER
2191	

MAIL DATE	DELIVERY MODE
09/11/2007	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE <u>3</u> MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
  Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1) ☒ Responsive to communication(s) filed on *12 July 2007*.

2a) ☐ This action is **FINAL**.   2b) ☒ This action is non-final.

3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4) ☒ Claim(s) *1-65* is/are pending in the application.

    4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5) ☐ Claim(s) _____ is/are allowed.

6) ☒ Claim(s) *1-65* is/are rejected.

7) ☐ Claim(s) _____ is/are objected to.

8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9) ☐ The specification is objected to by the Examiner.

10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.

    Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

    Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

    a) ☐ All b) ☐ Some * c) ☐ None of:

       1. ☐ Certified copies of the priority documents have been received.

       2. ☐ Certified copies of the priority documents have been received in Application No. _____.

       3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

    * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)

2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)

3) ☐ Information Disclosure Statement(s) (PTO/SB/08)
    Paper No(s)/Mail Date _____.

4) ☐ Interview Summary (PTO-413)
    Paper No(s)/Mail Date. _____ .

5) ☐ Notice of Informal Patent Application

6) ☐ Other: _____.

DETAILED ACTION

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the

basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

Claims 1-65 are rejected under 35 U.S.C. 102(e) as being anticipated by *Hershberg et al*

USPN 7,155,705.

Regarding claim 1

Hershberg et al teaches,

an XML data (figure 2, column 13, lines 14-19, In step 240, the data produced is used to

configure the exchange format.

For example, the DTD statements produced by the doclet, or the separate

process, are incorporated into a DTD file that describes the XML documents used

for data exchange with the application. For example, the statements shown in

Table 3 are inserted in the DTD file);

an XML schema which defines the XML data (column 18, lines 36-37, data comprises one or

more statements in an XML schema document);

an XML type which is a Java type corresponding to the XML schema and is capable of

accessing elements of the XML data from within Java (figures 1-2, column 10, lines 30-37, The

statement in line 1 is the document type declaration that tells an XML processor what DTD file,

if any, defines the elements and attributes used by the current XML document. <!DOCTYPE

. . . > indicates the statement is the document type declaration statement. The root element

of the document type, Employee, is the first item in the statement. SYSTEM indicates the next

value, "employee.dtd," is where the XML configuration information resides; and

a compiler capable of generating the XML type from the XML schema (column 9, lines 21-31,

according to the illustrated embodiment, a user-defined doclet 124 is included in the JavaDoc

process 120. The user-defined doclet 124 includes methods to be invoked for one or more

JavaDoc tags, including one or more user-defined tags. In other embodiments, additional

doclets are included in JavaDoc process 120. One or more methods of the user-defined doclet

124 produces statements 130 for an XML DTD or Schema document based on the XML

configuration data 116 in the comment statement 114 for a data object in the modified source

code file 112 and on the neighboring JAVA class definition statement. For example, the doclet

124 generates the XML DTD statements in Table 3).

Regarding claim 2

Hershberg et al teaches,

the compiler is capable of generating the XML type based on the definition of a Java web

services method (column 7, lines 40-46, The XML configuration information 116 is inserted

into the comment statement associated with a definition statement for a class of data objects,

including the attributes of the class. In the illustrated embodiment, the XML configuration

information 116 includes a tag 118 that identifies the XML configuration information 116

within the comment statement. In the illustrated embodiment, the tag 118 is a tag defined by a

user for the JavaDoc process 120. In other embodiments, any tag may be used).

Regarding claim 5

Hershberg et al teaches,

the XML type can be a movable cursor, capable of reading anywhere within the XML

data(column 18, lines 49-51, third data is one or more statements in an XML document type

definition (DTD) document, and wherein the first data includes one or more properties of the

parameter.

Regarding claim 7

Hershberg et al teaches,

the XML type can be shared among multiple Java components (column 12, lines 12-25, The

executable code of the first application 160 is illustrated as a process. When the first

application 160 is executing on the deployment platform 140, it exchanges data with other

applications, such as second application 180, using one or more XML documents. Execution-

time data exchange is indicated in FIG. 1C by arrows 135. For example, second application 180

produces XML document 132 based on the XML DTD file 130. The document 132

includes a reference 134 to the DTD file 130. A reference is indicated in FIG. 1C by arrow 137.

The first application accepts the data in XML document 132 by invoking the de-marshaling

process. For example, the first application 160 de-marshals the XML document having the

statements listed in Table 4. The "employee.dtd" value for the SYSTEM attribute in line 1 is an

example of the reference 134 to the XML DTD file 130).

Regarding claim 11

Hershberg et al teaches,

the XML type is capable of a number of XML data operations, which include: querying

XML data, transforming between XML types, and iterating over XML data document (column

5, lines 58-67, although JAVA and XML are described herein for purposes of illustrating

an example embodiment, the invention is not limited to this embodiment. In other

embodiments, other classes are bound to XML. In yet other embodiments, data structures in

source code in other languages may be bound to other open data exchange formats. For

example, data structures can be bound to columns and tables in a database system for use in a

query language data exchange. In some embodiments the JavaDoc tool is not employed.

Instead of the JavaDoc tool, a parser is developed to search through the source code and find the

binding information.

Regarding claims 14, 36 and 57

Hershberg et al teaches,

the constraints on the XML type are capable of validating the XML type (column 8, lines 56-67,

The XML configuration information includes the tag "@xml-attribute" and the properties

"required" and "element." The designation "element" refers to the element that this attribute

is attached to; "required" indicates that this attribute must be present in any XML element of

this type. The element property is set to a value "Employee" given between the quotation marks

in line 3.5. This tag indicates that the neighboring JAVA statement that defines a class of data

objects (in this case an attribute of the class) is to serve as an attribute of the element Employee

for the XML documents that are used to exchange data with the application. The attribute's

default property is required, which means that a value must be provided for the attribute

whenever the element Employee is included in an XML document).

Regarding claim 16

Hershberg et al teaches,

a global registry of XML transformations capable of looking up an existing XML

transformation between a source and a target type (figures 1-3, column 18, lines 5-14,

automatically generating, based on the first data and the second data, third data that describes

the data exchange format, wherein the third data comprises instructions defining a mapping

between attributes of the class of data objects and elements of the data exchange format; and

generating a marshalling module to convert a data object of the class of data objects into a data

item of the data exchange format as described by the third data).

Regarding claim 20

Hershberg et al teaches,

the lightweight XML store is capable of representing the retained XML data as a

hierarchical structure (column 8, lines 23-37, he tag, @xml-root-element, indicates that the

neighboring JAVA statement that defines a class is to serve as a root element for the XML

documents that are used to exchange data with the application. A root element serves as the top

of a hierarchy of elements that appear in an XML document. The property indicates that the root

element is to be placed in its own grammar file, which may contain other elements, and the root

element is identified as such in the grammar file; and the value for the property gives a name for

the DTD file. In this example, the neighboring JAVA statement is the statement in line 5

defining the class Employee. Thus the XML configuration information 116 in comment 114 in

the example of lines 3 through 4 indicates that the public class Employee is to be mapped to the

root element "Employee" in the XML grammar defined in employee.dtd).

Regarding claims 22, 43 and 64

Hershberg et al teaches,

the XML type is capable of accessing the XML data incrementally (column 10, lines 30-37, The

statement in line 1 is the document type declaration that tells an XML processor what DTD file,

if any, defines the elements and attributes used by the current XML document. <!DOCTYPE

. . . > indicates the statement is the document type declaration statement. The root element

of the document type, Employee, is the first item in the statement. SYSTEM indicates the next

value, "employee.dtd," is where the XML configuration information resides).

Regarding claims 15, 18, 19, 23, 37, 40, 41, 44, 58, 61, 62 and 65

Rejection of claim 1 is incorporated and further claims recites similar limitations as claim 1,

therefore claims 15, 18, 19, 23, 37, 40, 41, 44, 58, 61, 62 and 65 are rejected under same

rationale.

Regarding claims 3-4, 13, 24-26 and 45-47

Rejection of claim 1 is incorporated and further claims recites similar limitations as claim 2,

therefore claims 3-4, 13, 24-26 and 45-47 are rejected under same rationale as claim 2.

Regarding claims 6, 27, 28, 48 and 49

Rejection of claim 1 is incorporated and further claims recites similar limitations as claim 5,

therefore claims 6, 27, 28, 48 and 49 are rejected under same rationale as claim 5.

Regarding claims 8-10, 29-32 and 50-53

Rejection of claim 1 is incorporated and further claims recites similar limitations as claim 7,

therefore claims 8-10, 29-32 and 50-53 are rejected under same rationale as claim 7.

Regarding claims 12, 33-35 and 54-56

Rejection of claim 1 is incorporated and further claims recites similar limitations as claim 11,

therefore claims 12, 33-35 and 54-56 are rejected under same rationale as claim 11.

Regarding claims 17, 38-39 and 59-60

Rejection of claim 15 is incorporated and further claims recites similar limitations as claim 16, therefore claims 17, 38-39 and 59-60 are rejected under same rationale as claim 16.

Regarding claims 21, 42 and 63

Rejection of claim 19 is incorporated and further claims recites similar limitations as claim 20, therefore claims 21, 42 and 63 are rejected under same rationale as claim 20.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Anil Khatri whose telephone number is 571-272-3725. The examiner can normally be reached on M-F 8:30-5:00 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Wei Zhen can be reached on 571-272-3708. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

ANIL KHATRI
PRIMARY EXAMINER